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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/09/2001

Gregory Jantsch

13543-003001

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02/24/2006

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EXAMINER

KIM, AHSHIK

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/973,186	JANTSCH, GREGORY	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ahshik Kim	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/05/05 (RCE).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/5/05</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in  
5 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is  
eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)  
has been timely paid, the finality of the previous Office action has been withdrawn pursuant to  
37 CFR 1.114. Applicant's submission filed on December 5, 2005 has been entered.

### ***Amendment***

10 2. Receipt is acknowledged of the amendment filed on December 5, 2005. In the  
amendment claims 1 and 8 were amended. Currently, claims 1-38 remain in the examination.

### ***Drawings***

15 3. This application is filed with informal drawings which are acceptable for examination  
purposes only. Formal drawings will be required in response to this Office Action or when the  
application is allowed.

### ***Claim Rejections - 35 USC § 102***

20 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the  
basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5     5.     Claims 1-21, 23, 24, 26-31, and 33-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Graef et al. (US 4,664,369, previously cited, hereinafter "Graef").

Re claims 1-4, 8-12, 17, 18, 20, 21, 23, 24, 30, 31, and 33-38, Graef teaches a thickness indicator apparatus used in Automated Teller Machine (ATM) (see abstract; col. 2, lines 27+) for detecting double bills when the bills are retrieved from the stack (col. 1, lines 34+; col. 3, lines 58+; col. 6, lines 4+). . The thickness detector is comprised of two elongated fingers 50 (or free ends) attached to a wishbone 45 (col. 4, lines 16+; see figure 3). When bills move between the plate 42 and the elongated fingers 50, the elongated fingers are displaced/pushed by the thickness of the bill (col. 4, line 51 – col. 5, line 37). Re claim 5, the bill moving path further comprised of a roller 12 and a counter rotating roller 36 (col. 3, lines 36+; col. 3, lines 60+). In case of the bill correctly under the wishbone 45 (figure 12), the wishbone – inductive element is uniformly separated/displaced.

Re claim 6, the thickness of the bill causes wishbone 45 to rotate about the pin 58 in counter clockwise direction (col. 5, lines 9+). Accordingly, the pin is considered a rotational axis.

20     Re claims 7, 13, 15, and 16, as bills pass between the plate 40 and elongated finger, the target 52 rotates toward the proximity sensor 66 (col. 4, lines 39+), and the sensor generates a voltage signal proportional to the distance between the sensor 66 and the target 52 in inductive manner.

Re claim 14, as shown in figure 1, the elongated finger 50 is connected to a spring-loaded locking means 64 (col. 4, lines 28-38).

Re claims 19 and 26-29, as shown in figure 3, the apparatus is comprised of a housing/frame 15 which houses a bill thickness detecting component (see figure 3; col. 3, lines 36+).

5 ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 22, 25, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
15 Graef et al. (US 4,664,369, previously cited).

Although Graef does not explicitly suggests the details of the housing as they are recited in the above-mentioned claims (snap-in bearings and grounding elements comprising braided wire and metal lugs), it is the Examiner's view that Graef shows a box-type of housing which is substantially the same housing Applicant claims. Perhaps the component parts for building such  
20 housing may be different, but it is the Examiner's view that more substantial elements – thickness (or double bills) detection utilizing elongated fingers are disclosed by Graef. The differences in constructing housing may not patentable unless Applicant particularly points out patentabilities of the housing.

25 ***Response to Arguments***

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8. Applicant's amended claims and remarks filed on December 5, 2005 have been carefully reviewed and considered.

Applicant amended claims 1 as follows, "A method comprising ..... determining the amount by which the free end is moved by measuring relative rotation of two inductively coupled elements which maintain a uniform separation." Claim 8 is directed toward the apparatus incorporating the similarly amended phrase. However, it is the Examiner's view that Graef still discloses amended claims 1 and 8.

As shown in figures 12-15, the bills are positioned under the inductive element in ideal manner (figure 12) and other situation (figure 14) wherein the bill is skewed, and only the bill is under one part of the inductive element. In case of figure 14, the inductive element is uniformly separated/displaced.

### *Conclusion*

I. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571)272-2398. The fax number directly to the Examiner is (571)273-2393. The fax phone number for this Group is (703)872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].


*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly*

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*set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

5 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available for Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions or access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

15   
Ahshik Kim  
Primary Examiner  
Art Unit 2876  
February 21, 2006

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